

IDAHO DEPARTMENT. OF FISH & GAME

Jerry M. Conley, Director Grace Hatchery

Annual Report



October 1, 1979 - September 30, 1980

by

Jerry Mowery
Fish Hatchery Superintendent II

December, 1980

TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	1
OBJECTIVES	3
INTRODUCTION	3
FISH PRODUCTION	3
SPAWNTAKING OPERATIONS	3
FISH HEALTH	4
FISH FEED UTILIZED	4
HATCHERY IMPROVEMENTS	4
PUBLIC RELATIONS	4
RECOMMENDATIONS	4
ACKNOWLEDGMENTS	5

Grace Hatchery

ABSTRACT

During-the 1980 fish year, Grace Hatchery produced 110,416 pounds of rainbow trout, cutthroat trout, and mackinaw trout that were planted in Region 5, located in southeastern Idaho. This included some 317,562 catchable sized rainbow; 51,660 catchable sized cutthroat; 220,210 rainbow in the 3 to 6 inch length range; 40,250 cutthroat and 31,450 mackinaw in the same size range. Fish planted that were less than 3 inches in length numbered as follows: rainbow 62,000 and cutthroat 41,470.

The Bear Lake cutthroat trapping and spawning effort in conjunction with Utah was continued during the fish year and was successful.

No appreciable fish health problems were experienced during the year, although some loss of mackinaw eggs did occur.

The cost of fish food was \$36,604.03 and we fed 191,070 pounds of food during the year. The conversion ratio was 1.73 and fish food costs were \$.332 for each pound of fish produced. Total costs per pound, excluding capital outlay, was \$1.24.

New concrete floors were placed in the large raceways during the year, and footings were poured for 4 new raceways. Although a new domestic water supply is badly needed, this had not been accomplished at the year's end.

Author:

Jerry Mowery
Fish Hatchery Superintendent II

OBJECTIVES

1. To produce approximately 100,000 pounds of trout of various sizes for planting in the waters of southeastern Idaho.
2. To operate a fish trap on St. Charles Creek, a tributary to Bear Lake, to insure production of the native cutthroat stocks. This program is a cooperative effort of Utah and Idaho.
3. To receive and rear rainbow trout eggs from commercial sources, Hayspur and American Falls Hatcheries; cutthroat eggs from Henrys Lake and Auburn, Wyoming Hatcheries; mackinaw eggs from Jackson (Wyoming) National Fish Hatchery.

INTRODUCTION

Grace Hatchery is located in Caribou County, approximately 8 miles south of the town of Grace, Idaho. The hatchery water source is several springs that form a major part of Whiskey Creek. Water flows in use for fish culture range from 9 cfs during the summer irrigation season, to slightly over 16 cfs in the fall and winter. The spring water is a constant 52° F temperature.

Fish rearing facilities include a hatchery building that houses 10 stacks of 16 tray Heath incubators, and 16 concrete vats that are 15 feet long by 3 feet wide that are used to start fry on feed. Outside rearing ponds include 6 raceways that measure 300 feet long by 14 feet wide; 4 raceways that measure 60 feet long and 7 feet wide, and 4 raceways 60 feet long by 3 feet wide.

FISH PRODUCTION

Grace Hatchery produced 764,602 fish that weighed a total of 110,416 pounds. This figure included 317,562 catchable rainbow trout (in excess of 6 inches in length) that weighed 83,745 pounds; 51,660 catchable cutthroat trout weighing 12,600 pounds. Some 220,210 rainbow trout at a weight of 7,660 pounds and ranging in length from 3 to 6 inches were released, as were 40,250 cutthroat of a similar size and weighing 1,750 pounds. Some 31,450 mackinaw trout that also ranged in size from 3 to 6 inches and weighing 850 pounds were also planted. Fish that were up to 3 inches in length were also planted in several reservoirs in the area, and numbered 62,000 rainbow that weighed 400 pounds along with 41,470 cutthroat trout that weighed 715 pounds.

Most of the fish produced at Grace Hatchery were planted in a five county area consisting of Caribou, Franklin, Oneida, Bear Lake and Bingham counties, all located in Region 5 (southeastern Idaho).

SPAWNTAKING OPERATIONS

Grace Hatchery installed and maintained a weir and fish trap on St. Charles Creek, a tributary to Bear Lake. The large cutthroat that are native to Bear Lake were then transported to Swan Creek trap in Utah for spawning and rearing. This cooperative effort has been in operation for the past several years, and all eggs and fry are returned to the lake to enhance populations of cutthroat on this large body of water. We were not engaged in any other spawntaking operations this year.

FISH HEALTH

No major losses to diseases were recorded during this fish year. We did lose most of the mackinaw eggs that were shipped from Jackson National Hatchery in Wyoming. The cause of the loss could not be detected, but most of the eggs were not eyed.

FISH FEED UTILIZED

During the fish year we fed 191,070 pounds of dry fish food that cost \$36,604.03 and produced 110,416 pounds of fish. This is calculated to arrive at a conversion ratio of 1.73 pounds of feed to produce each pound of fish flesh. Fish food cost per pound of fish production was \$.332. When all costs were included, except capital outlay items, costs were calculated to be \$1.24 per pound of fish produced.

HATCHERY IMPROVEMENTS

At the time of this writing, we are in the process of pouring new concrete bottoms in the six large raceways. Footings are being placed for 4 new raceways that will add needed fingerling rearing space. No action has been taken to drill a well or wells to obtain potable domestic water at the hatchery residences, even though the present spring water source has been known to be contaminated for a number of years, and money has been budgeted to accomplish this work.

The walkin freezer was upgraded by installing a new compressor unit, and other components. New electrical services were installed in two of the houses. A great deal of time and effort was spent on clean-up and routine maintenance work.

New carpets were installed in the living rooms of all three houses.

PUBLIC RELATIONS

The hatchery was visited by several people during the year. The settling pond was opened to public fishing to reduce the large populations of fish present. Public response was good and several nice fish were harvested by anglers. Numerous contacts with the fishing public were made during the course of our fish planting and other activities.

RECOMMENDATIONS

The access raod to the hatchery should be given a new layer of gravel. During severe winter storms the steep grade of the road makes access to the hatchery difficult. We will contact the county and request that they assist with the maintenance of the hatchery raod. The 1 ton unit that is used for snow removal and fish feeding is worn out and should be replaced.

ACKNOWLEDGMENTS

The hatchery was staffed by the following people during the fish year.

Calvin Coziah - Fish Hatchery Superintendent II

Gerald Mowery - Fish Hatchery Superintendent II

Paul Smith - Fish Hatchery Superintendent I

John Thorpe - Fish Culturist